

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20005

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New Implementation Deadline for TTY Access)
to Digital Wireless Systems for 911 Calls) CC Docket No. 94-102

SPRINT PCS COMMENTS

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Sprint PCS Comments

Sprint Spectrum, L.P., d/b/a Sprint PCS ("Sprint PCS"), below responds to the Commission's request for comment concerning a new implementation deadline for text telephone ("TTY") 911 access to digital CMRS systems and other implementation issues pertaining to TTY access.¹

I. Introduction and Summary of Comments

Remarkable progress has been made over the past 18 months regarding TTY access to digital CDMA mobile networks: a technical solution has been discovered; industry standards have been approved; network and handset vendors have begun the process of re-designing their equipment to comply with these new standards; and at least Sprint PCS has begun extensive TTY access network/service planning. (The significance of having so many developments occur over such a short period of time should not be understated.) Only two years ago, no solution was in sight. Today, TTY access to digital CMRS systems *will* become a reality in the foreseeable future.

¹ See *Public Notice*, "Wireless Telecommunications Bureau Seeks Comment on New Implementation Deadline for TTY Access to Digital Wireless Systems for 911 Calls," CC Docket No. 94-102, DA 00-1091 (May 17, 2000), 65 Fed. Reg. 33506 (May 24, 2000) ("TTY Public Notice").

The Commission has decided that it is time to set an implementation deadline, and it has tentatively proposed a deadline of December 31, 2001. Sprint PCS is not opposed to the Commission establishing a new deadline. But experience in this docket relating to E911-ALI and TTY access and in other proceedings (*e.g.*, CALEA) confirm that the Commission should not be quick to set a deadline for carriers until there exist facts suggesting that the deadline is realistic and achievable. Yet another round of carrier waiver requests would not be productive and would, in fact, distract carriers from the very work that remains to be accomplished.

Two factors are important in adopting a new TTY access deadline for carriers. First, the deadline must acknowledge and accommodate the dependencies carriers have on the handset and in particular, network infrastructure vendors. Carriers cannot provide a new capability like TTY access without the cooperation of its vendors and the delivery of their TTY upgrades. Carriers need time following vendor delivery to test the new modifications and for infrastructure equipment, additional time to implement the modifications throughout their networks. Simply put, the sooner vendors deliver their TTY modifications to carriers, the sooner carriers will be able to support TTY access to TTY customers.

Second, the Commission needs to decide the importance of its objective of achieving TTY access “without imposing additional costs on consumers who use [TTY] devices.”² Sprint PCS needs a minimum of one year after all its network vendors make their upgrades available to it for testing before it can provide throughout its national network a finished service to TTY consumers. A shorter implementation period is not rec-

² *TTY Public Notice* at 2.

ommended. Reducing testing and implementation time will simply increase the risk of errors impacting service quality and reduce the time needed to train employees thoroughly, including the sales and customer care representatives that will be interacting with TTY customers and their special needs. TTY customers deserve to be treated with the same quality and level of service that other Sprint PCS customers receive. Sprint PCS should not be required to “cut corners” and provide inferior service to a new set of customers — especially customers that may have special needs and, accordingly, require special attention.

A carrier like Sprint PCS must undertake numerous steps before introducing a new service or capability in its national network (*e.g.*, ensure handset availability, modify systems, train employees). However, by far the most important event influencing the date of TTY access availability is the date that network infrastructure vendors will make their TTY modifications available to Sprint PCS for testing. One of Sprint PCS’ network vendors is significantly behind other network vendors, stating that its TTY modifications will not even be available for testing until September 30, 2001. If this date holds firm (although Sprint PCS has since invoked escalation procedures), Sprint PCS will not be capable of providing ubiquitous TTY access before October 1, 2002. If, however, this network vendor can find a way to accelerate its delivery by six months for example, Sprint PCS would be able to accelerate its national TTY service inauguration date by six months.

There is no need to impose burdensome new reporting requirements on carriers. Carriers know what needs to be done to implement TTY access. The critical component is getting network vendors to deliver their product for testing. At present,

most of Sprint PCS' vendors have given Sprint PCS target delivery dates that would enable it to introduce TTY access in late 2001 or early 2002. However, Sprint PCS cannot launch TTY nationwide without the cooperation of *all* of its vendors, one of which is lagging significantly behind the others with its delivery dates. Thus, if the Commission wants to play a constructive role, it should monitor the progress of this network vendor.

II. New Implementation Deadline Issues

Sprint PCS is not opposed at all to the Commission establishing an implementation deadline for digital CMRS TTY access. However, any deadline the Commission establishes must take into account the dependency carriers have on their vendors, implementation issues uniquely impacting the CMRS industry (the "quiet period"), and the customer expectations of large national carriers like Sprint PCS. Given the vendor delivery commitments received to date, at the current time October 1, 2002 is the earliest deadline that Sprint PCS could reasonably achieve.

A. At Present, a December 31, 2001 Implementation Date Is Not Reasonably Achievable

The Commission seeks comment on whether December 31, 2001 "represents a reasonable deadline for implementation of a digital wireless TTY solution."³ It further asks carriers "to identify the specific tasks they expect to be required to implement a TTY solution."⁴ As discussed below, given the facts as they exist today, a December 31, 2001 deadline is not reasonable; October 1, 2002 should be reasonable, although it may be possible to accelerate that date with Commission assistance.

³ See *TTY Public Notice*, 65 Fed. Reg. at 33507 ¶ 3.

⁴ *Id.*

A carrier must undertake numerous steps to introduce a new capability like TTY access. It must have access to thoroughly tested TTY-compatible handsets so customers can take advantage of the new network capability.⁵ It must modify its operational support and billing systems to accommodate the new capability.⁶ And perhaps most importantly with regard to TTY, it must make fundamental changes to its customer care systems and procedures to address customer questions from TTY users relating to billing, use of their service, and the like. In addition, given the unique needs and requirements of TTY customers, Sprint PCS must engage in considerable training of its sales and customer care representatives so they can interact effectively with new TTY customers.

While all these steps are necessary, the event that will have the greatest impact on the inauguration date of TTY access is the date that network infrastructure vendors first make their TTY modifications available to the carrier. Sprint PCS requires approximately one year from when all network vendors make their solutions available before it can provide the new capability as a finished service to its customers. Sprint PCS engages in three different activities once it receives a new network modification such as TTY access:

1. Laboratory Testing (three-to-four months). Sprint PCS first evaluates any new network modification in its testing laboratory. The amount of

⁵ At the present time, Sprint PCS does not foresee handsets being an issue so long as the deadline is not before December 31, 2001. Sprint PCS has assurances from all its vendors that their future handsets will be TTY-compatible.

⁶ At this early stage, Sprint PCS understandably has not made firm decisions relative to pricing and billing for TTY access. The FCC must understand that billing systems are extraordinarily complex and entail considerable time to modify. Thus, depending on the implementation deadline that the FCC establishes, Sprint PCS' flexibility to implement a particular pricing/billing ar-

time consumed by this process depends on several variables, including the complexity of the modifications being evaluated and whether “bugs” requiring fixes are discovered. Network vendors have decided to include their new TTY access feature as part of larger software generics, which include other new network capabilities. Sprint PCS’ experience with testing new switch generics is that the process generally consumes three to four months — longer if problems are discovered. Interoperability tests will also be performed with the handsets to ensure compatibility.

2. First Market Application (two-to-three months). Once a new modification has been successfully tested in its laboratory, Sprint then installs and tests the feature in one market under “real world” conditions. Sprint PCS generally engages in a separate first market application for each vendor’s modifications (*e.g.*, three FMAs if three switch vendors are submitting the same feature). The first market application (installation and testing) generally takes between two and three months per vendor application.
3. Installation (six-to-10 months). Sprint PCS can begin installation once the new modification has been thoroughly tested in the lab and the field. Sprint PCS has a large, nationwide network, and the new TTY access capability will require installation in large parts of Sprint PCS’ network, including:

rangement may be limited initially to the extent particular arrangements require major billing system modifications.

- Install new generic software in each mobile switching center (over 100 MSCs);
- Install new software in certain base station controllers (over 100 affected BSCs);
- For one vendor's solution, install over 1,000 vocoder cards in all its MSCs;
- Install vocoder cards in other vendor solutions (number is not yet known).

Based on its experience, Sprint PCS estimates that an installation of this magnitude, coupled with the fact that the installations must be done locally on site (rather than centrally), will take a minimum of six months, with eight months perhaps being more realistic (10 months if the installation period crosses into the quiet period discussed below).

It is thus apparent from the foregoing that Sprint PCS' one-year estimate from the time of vendor delivery to service inauguration is the minimum amount of time Sprint PCS will require.⁷

Two of Sprint PCS' major network vendors have indicated that they should be able to deliver their TTY modifications to Sprint PCS if not late this year, then

⁷ Smaller carriers with fewer impacted network components may not need a full year. However, smaller carriers may also not have the resources that larger carriers have, and they may not receive the vendor upgrades as early as larger carriers. Sprint PCS therefore recommends that all of industry be given at least one year from the delivery date of all vendor upgrades.

early next year.⁸ If Sprint PCS used only the equipment of these two vendors, it could likely meet a TTY deadline of late 2001 or early 2002.

However, a third major network vendor advised Sprint PCS earlier this month that it cannot make its TTY solution available to Sprint PCS for testing until September 30, 2001. Sprint PCS has already invoked contract escalation procedures in an attempt to improve upon this delivery date. Nevertheless, based on the facts as they exist today, Sprint PCS must assume that this vendor is incapable of accelerating its delivery date. Given that Sprint PCS requires approximately one year to test and implement this vendor's solution, a TTY deadline before October 1, 2002 is not realistic at present.

B. For the Benefit of TTY Customers, the Commission Should Permit National Carriers to Use a National Implementation Date

Sprint PCS is a national carrier and a successful carrier.⁹ Sprint PCS customers have come to expect a certain level of service from Sprint PCS. As but one example, Sprint PCS customers expect that the same services and features they enjoy in their home market will also be available in all other markets where they travel. It is therefore Sprint PCS' standard business practice to implement new services and features nationally, at one time, rather than activate features on a market-by-market basis.¹⁰

⁸ Sprint PCS has not yet received a delivery commitment date from a newer network vendor. However, Sprint PCS is not overly concerned because at this time, it does not make extensive use of the new vendor's equipment.

⁹ For each of the past five or six quarters, Sprint PCS has acquired more new customers than any other CMRS provider — including carriers much larger than it.

¹⁰ Implementing a new service or feature on a market-by-market basis also introduces a whole host of operational challenges (*e.g.*, thousands of customer care representatives must be trained before the feature is introduced in the first market when early demand will be limited given the limited availability of the feature).

The Commission should not require Sprint PCS to treat TTY access differently than any other new feature it implements in its network (by requiring it to implement TTY access in markets using one vendor's equipment before markets using other vendor equipment). TTY customers undoubtedly will have the same expectations as other Sprint PCS customers. Thus, if they can use their TTY-compatible handset in their home market, they will justifiably expect to use their handset and enjoy TTY service in other markets as they travel. If the Commission were to require Sprint PCS to depart from its ordinary business practice relative to the introduction of TTY access it would, for all practical purposes, effectively relegate TTY customers to second-class citizenship.

It bears emphasis that the issue is not TTY owner access to mobile networks; they have such access today *via* analog cellular service. Sprint PCS understands that some TTY owners are anxious to take advantage of the benefits of digital CMRS over analog CMRS. However, Sprint PCS wants to provide, and undoubtedly TTY customers want to receive, a quality service. They will receive this quality and care only if Sprint PCS can treat TTY access (and, therefore, TTY customers) like all other new features and all other Sprint PCS customers.

C. Any New Deadline Should Accommodate the CMRS Industry's "Quiet Period" for Network Changes

Sprint PCS has a "quiet period" during which it installs no new vendor modifications in its network. Sprint PCS' quiet period is two months in length, from November 15 through January 15. The Commission should not establish a deadline that falls within this quiet period.

The fourth quarter of each year is usually a CMRS provider's busiest season. For example, Sprint PCS acquired over one million net new customers during 4Q99

alone (an industry record). It is imprudent to modify or add new network capabilities at a time when network usage is growing so rapidly; finite network resources are better focused on ensuring that Sprint PCS has adequate network capacity throughout its network to meet the sizable new demand for capacity generated during the fourth quarter. Likewise, the holiday season is not the time to train sales and customer care representatives to assume new responsibilities; during the fourth quarter, their time must be devoted to activating new accounts and educating the many new customers about their new service.

It is unlikely that all CMRS have the same quiet period as Sprint PCS. Sprint PCS therefore recommends that whatever TTY deadline the Commission may adopt, it be outside the three-month period from November 1 through January 31.

III. New Carrier Reporting Requirements Are Not Only Unnecessary, But Also Would Be Counterproductive

The Commission asks whether it “should adopt additional requirements that would enable it to better monitor carrier progress toward [TTY implementation]. For example, should the Commission require digital wireless service providers to submit an implementation plan for digital TTY accessibility?”¹¹

Sprint PCS knows precisely what needs to be done to implement TTY access.¹² Requiring Sprint PCS to submit one or more reports/implementation plans will not add value to the process in any way. In fact, imposing such a new burden on carriers would have the undesirable result of slowing down the implementation process — because the same people responsible TTY implementation would be the people responsible

¹¹ *TTY Public Notice* at 3.

¹² For example, Sprint PCS’ TTY product manager meets weekly with representatives of the internal organizations (*e.g.*, network, systems, customer care) responsible for TTY implementation in their functional area to discuss timelines, new developments, new problems, and the like.

for preparing any regulatory reports. By definition, time expended on the preparation of regulatory reports is time not spent on meaningful TTY implementation.¹³

As noted, the critical event affecting TTY implementation is the date the major network vendors deliver their TTY solutions to carriers for testing. Two of the three major network vendors are on schedule; they require no assistance. However, the third major vendor has indicated that it is nine months behind its competitors. If the Commission wants to play a constructive role and if it wants to take action that will meaningfully affect TTY implementation, it should monitor not carriers, but the one network solution vendor that is so far behind the other vendors.¹⁴

Sprint PCS is also not opposed to a carrier “exception” reporting requirement — whereby carriers would be required to report on a specified date in advance of the TTY deadline that they may not be able to meet the deadline. Indeed, such an “exception” reporting procedure may be a useful means to determine whether the deadline the Commission establishes is, in fact, realistic.

Sprint PCS recognizes that other services, such as those provided by TRS centers, are likely to be impacted by the availability of TTY connectivity over digital CMRS networks. Thus, Sprint PCS supports the proposition that some methodology be available to inform TRS centers of carrier progress TTY implementation. One approach

¹³ Sprint PCS must also question the FCC’s ability to review hundreds of carrier-specific reports. With CALEA, for example, the FCC recently gave most of industry a blanket nine-month extension of the deadline so it would have the time to review each of the waivers filed by individual carriers. Given that carriers use the same network vendor equipment, a more efficient solution would have been to have vendors submit any regulatory paperwork that the FCC deems necessary.

¹⁴ As noted, at this time Sprint PCS does not foresee any issue over the availability of TTY-compatible handsets (although necessary handset testing and network interoperability testing has not yet been performed).


would be for carriers to contact the appropriate TRS centers in the latter stages of implementation to ensure compatibility between the systems and work out any back-office support functions as needed.¹⁵

V. Conclusion

Based on the facts as they exist today, a TTY access implementation deadline before October 1, 2002 is not reasonably achievable. If the Commission wants to accelerate this date, it should monitor the progress of the one network vendor that appears to be significantly behind other network vendors. Accelerating delivery of that vendor's TTY solution would result in a proportional acceleration of the date that Sprint PCS (and presumably other carriers using this vendor's equipment) could introduce TTY access throughout its nationwide network.

Respectfully submitted,

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¹⁵ Sprint PCS intends to test its TTY capability with the TRS centers whether or not the FCC imposes such a requirement.

CERTIFICATE OF SERVICE

Virginia Daily hereby certifies that on this 19th day of June 2000, I served copies of the forgoing comments on the persons listed below by first-class postage prepaid United States mail:

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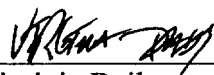
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